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EXAMINER	
PARRY, CHRISTOPHER L	
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	09/749,826	HICKS ET AL.	
	Examiner	Art Unit	
	CHRIS PARRY	2421	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *10 September 2008*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1,4-7,17-20 and 23-34* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1,4-7,17-20 and 23-34* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Response to Arguments

1. Applicant's arguments with respect to claims 1, 4-7, 17-20 and 23-34 have been considered but are moot in view of the new ground(s) of rejection.

2. Although a new ground of rejection has been used to address additional limitations that have been added to claim 1, a response is considered necessary for several of applicant's arguments since reference Rakib, will continue to be used to meet several claimed limitations.

In response to applicant's argument, (Page 19, 2nd ¶, lines 4-6) stating the combined teachings do not disclose a system data bus connected to the media bus, the system data bus unable to send information to the media bus the examiner respectfully disagrees.

As shown in figure 7A of Rakib, data from circuits 786, 747, and 726 are output to media bus 761. Circuits 786, 747, and 726 cannot accept inputs as shown by the arrows in figure 7A. Further, Rakib teaches microprocessor 728 transmits information to IP video circuit 758 by placing data on bus 756 (Col. 34, lines 41-52). Furthermore, Rakib teaches microprocessor 728 places all data and data requests on bus 756 which has direct connections to each circuit. Accordingly data from microprocessor 728 is placed on bus 756 where the data is directly transmitted to the addressed circuit and the data is not routed via a secondary bus, such as bus 761. Thus Rakib discloses the system data bus (756 – figure 7A) connected to the media bus (761 – figure 7A) and

configured to only receive the deciphered information signals from the media bus, the system data bus unable to send information to the media bus (i.e., system data bus 756 only sends signals to individual circuits that are directly connected) (figure 7A) (Col. 35, line 56 to Col. 36, line 30)

Claim Objections

3. Claim 17 is objected to because of the following informalities:

a. Claim 17 recites the limitation "the media bus" in line18. There is insufficient antecedent basis for this limitation in the claim.

b. Claim 17 recites the limitation "the network bus" in line 26. There is insufficient antecedent basis for this limitation in the claim.

Appropriate correction is required.

Claim Rejections - 35 USC § 112

4. The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

5. Claim 17 rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

6. Claim 17 recites the limitation “connecting a processor connected to the system data bus” in line 33. However, a processor cannot be connected to the system data bus if the processor is already connected, thus the claim is found to be indefinite.

Claim Rejections - 35 USC § 103

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

8. Claims 1 and 4-7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Rakib et al. "Rakib" (USPN 6,889,385) in view of Sheppard et al. "Sheppard" (US Pub. No. 2003/0192053) further in view of Hirota (USPN 6,839,902) and further in view of Ellis et al. "Ellis" (US 2008/0184306 A1).

Regarding Claim 1, Rakib discloses a system for multimedia on demand (figure 7A – 308), the system comprising:

a plurality of buses comprising a media bus (761 – figure 7A), a network bus (760/787 – figure 7A), and a system data bus (756 – figure 7A);

a plurality of tuners (780, 700, 702, 704 – figure 7A) and demodulators (820, 738, 746 – figure 7A) connected to an analog-to-digital converter (730 – figure 7A), the plurality of tuners and demodulators sending an analog information signal to the analog-to-digital converter, and the analog-to-digital converter outputting digital information signal based at least in part on the analog information signal (Col. 32, lines 49-52, Col. 33, lines 24-39, Col. 34, lines 16-52);

the plurality of tuners and demodulators also connected to a decryption circuit (726/786 – figure 7A) that decrypts an encrypted information signal received from the

plurality of tuners and demodulators and produces a decrypted information signal (Col. 36, lines 4-30);

a decoder circuit (742 – figure 7A) that coverts the information signal from one format to a second format (Col. 34, lines 24-36);

a cipher/decipher circuit connected to the decoder circuit [742] and connected to the analog-to-digital converter [730] that deciphers the digital information from the analog-to-digital converter and deciphers the converted decrypted information signal from the decoder circuit (i.e., compressed video data in encapsulated in PCI bus packets for transmission on bus 761) (Col. 34, lines 37-38);

the cipher/decipher circuit connected to the media bus (761 – figure 7A) and sending deciphered information signals to the media bus (Col. 34, lines 37-41);

the system data bus (756 – figure 7A) connected to the media bus (761 – figure 7A) and configured to only receive the deciphered information signals from the media bus, the system data bus unable to send information to the media bus (i.e., system data bus 756 only sends signals to individual circuits that are directly connected) (figure 7A) (Col. 35, line 56 to Col. 36, line 30);

the network bus (760/787 – figure 7A) connected to the system data bus (756 – figure 7A) and receiving system data bus information communicated along the system data bus (Col. 34, lines 48-52);

a mass storage device (135 – figure 7A) connected to the system data bus (756 – figure 7A);

a data switch (786 – figure 7A) connected to the network bus (760/787 – figure 7A), the data switch receiving the system data bus information and sending the system data bus information to one or more switch ports; (Col. 33, lines 32-35 and Col. 34, lines 48-59)

a processor (728 – figure 7A) connected to the system data bus (756 – figure 7A) (Col. 33, lines 24-35); and

memory (129 – figure 7A) coupled to the system data bus (756 – figure 7A).

Rakib fails to specifically disclose a decoder circuit connected to the decryption circuit, a cipher/decipher circuit connected to the decoder circuit, a video overlay processor, a network bus receiving video overlay signals, a mass storage device connected to the system data bus and storing the system data bus information and the video overlay signals, a data switch connected to the network bus, the data switch receiving the system data bus information and the video overlay signals and sending the system data bus information and the video overlay signals to one or more switch ports, and wherein a browser-based graphical user interface is stored in the memory.

In an analogous art, Sheppard discloses a system for multimedia on demand (figure 5), the system comprising:

a video overlay processor (450 – figure 5) connected between the system data bus (422 – figure 5) and the media bus (424 – figure 5), the video overlay processor receiving the deciphered information signals from the media bus [424] and sending video overlay signals to the system data bus [422] (¶ 0069-0071);

the network bus (interconnecting line between CNTRL BUS 422 and NIM 410) connected to the system data bus (422 – figure 5) and receiving system data bus and video overlay information communicated along the system data bus (¶ 0057-0058 & 0069-0071).

Accordingly, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the system of Rakib to include a video overlay processor and a network bus receiving system data bus and video overlay information as taught by Sheppard for the benefit of supporting communications with multiple locations within the home.

The combination of Rakib and Sheppard fail to specifically disclose a decoder circuit connected to the decryption circuit and a mass storage device receiving system data bus information and video overlay signals.

In an analogous art, Hirota discloses a system for multimedia on demand (figure 1), the system comprising:

a decoder circuit (17 – figure 1) connected to the decryption circuit (15 – figure 1) that coverts the decrypted information signal from one format to a second format (Col. 3, lines 25-48);

a video overlay processor (110 – figure 1) connected between the system data bus and the media bus, the video overlay processor receiving the deciphered information signals from the media bus and sending video overlay signals to the system data bus (Col. 3, lines 40-59);

a mass storage device (119 – figure 1) connected to the system data bus and storing the system data bus information and the video overlay signals (Col. 4, lines 20-64).

Accordingly, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the system of Rakib and Sheppard to include a decoder circuit connected to the decryption circuit and a mass storage device storing system data bus information and the video overlay signals as taught by Hirota for the benefit of allowing user's to store their favorite programs for viewing at a later time.

The combination of Rakib, Sheppard, and Hirota fail to specifically disclose wherein a browser-based graphical user interface is stored in the memory, the processor automatically downloads and stores content items to the memory, the processor receives an instruction to retrieve the graphical user interface from the memory, and the processor sends the graphical user interface to a client device with the graphical user interface describing the content items stored in the memory.

In an analogous art, Ellis discloses a system for multimedia on demand (17 – figures 2a-2e), the system comprising:

a processor (11 – figures 2a-2e); and memory (13,15 – figures 2a-2e);

wherein a browser-based graphical user interface (350 – figure 18d; ¶ 196) is stored in the memory (i.e., memory 13/15 may be used to cache program guide data including directory data, ¶ 0078-0080), the processor [11] automatically downloads and stores content items to the memory (i.e., processing circuitry 11 retrieves program guide data from program guide server 25, ¶ 0067-0070), the processor [11] receives an

instruction to retrieve the graphical user interface [350] from the memory (i.e., user television equipment 22 receives a Directory command from remote control 40 which is processed by remote server 24), and the processor [11] sends the graphical user interface [350] to a client device (22 – figures 2a-2e) with the graphical user interface [350] describing the content items (i.e., recorded programs) stored in the memory (i.e., memory 13/15 stores a directory of recording programs for the user and when requested, the programs are displayed for the user as shown in figure 18d) (¶ 0075-0080, 0082, 0148-0151, and 0196).

Accordingly, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the combination of Rakib, Sheppard, and Hirota to include wherein a browser-based graphical user interface is stored in the memory, the processor automatically downloads and stores content items to the memory, the processor receives an instruction to retrieve the graphical user interface from the memory, and the processor sends the graphical user interface to a client device with the graphical user interface describing the content items stored in the memory as taught by Ellis for the benefit of providing a user-friendly display means for displaying to the viewer programs that have previously been recorded.

As for Claim 4, Rakib, Sheppard, Hirota, and Ellis disclose, in particular Rakib teaches, wherein the processor receives a command from the client device that was transmitted from a remote control (Col. 33, lines 24-35).

As for Claim 5, Rakib, Sheppard, Hirota, and Ellis disclose, in particular Ellis teaches, wherein the processor retrieves another instruction from the memory that is associated with the command from the control (¶ 0077-0078 and 0148-0149).

As for Claim 6, Rakib, Sheppard, Hirota, and Ellis disclose, in particular Ellis teaches, wherein the processor includes instructions in the graphical user interface that control the system from the client device (¶ 0077-0078 and 0149-0152).

As for Claim 7, Rakib, Sheppard, Hirota, and Ellis disclose, in particular Ellis teaches, a data table (i.e., directory of recorded programs) stored in the memory that associates a content identifier (i.e., program title) to a usage indicator (i.e., is the program recording pending or has it been recorded) for each content item, the content identifier identifying each content item automatically downloaded to the memory and the usage indicator indicating that a content item has been played (¶ 0080-0082 and 0148-0150)

9. Claims 17-20 and 23-34 are rejected under 35 U.S.C. 103(a) as being unpatentable over Rakib in view of Sheppard, further in view of Hirota, further in view of Arsenault et al. "Arsenault" (US 2004/0175120 A1), further in view of Ellis and further in view of Craig (USPN 5,790,176) [of record].

Regarding Claim 17, Rakib discloses a computer readable medium storing processor executable instructions for performing a method of providing multimedia on demand, the method comprising:

connecting a plurality of tuners (780, 700, 702, 704 – figure 7A) and demodulators (820, 738, 746 – figure 7A) to a system data bus (756 – figure 7A) and to an analog-to-digital converter (730 – figure 7A), the plurality of tuners and demodulators sending an analog information signal to the analog-to-digital converter, and the analog-to-digital converter outputting digital information signal based at least in part on the analog information signal (Col. 32, lines 49-52, Col. 33, lines 24-39, Col. 34, lines 16-52);

connecting the plurality of tuners and demodulators to a decryption circuit (726/786 – figure 7A) that decrypts an encrypted information signal received from the plurality of tuners and demodulators and produces a decrypted information signal (Col. 36, lines 4-30);

connecting a decoder circuit (742 – figure 7A) to a decryption circuit [725/786] that coverts the decrypted information signal from one format to a second format (Col. 34, lines 24-36);

connecting a cipher/decipher circuit to the decoder circuit [742] and to the analog-to-digital converter [730] that deciphers the digital information from the analog-to-digital converter and deciphers the converted decrypted information signal from the decoder circuit (i.e., compressed video data in encapsulated in PCI bus packets for transmission on bus 761) (Col. 34, lines 37-38);

connecting the cipher/decipher circuit to a [the] media bus (761 – figure 7A) and sending deciphered information signals to the media bus (Col. 34, lines 37-41);

connecting the system data bus (756 – figure 7A) to the media bus (761 – figure 7A) and configuring the system data bus to only receive the deciphered information signals from the media bus, the system data bus unable to send information to the media bus (i.e., system data bus 756 only sends signals to individual circuits that are directly connected) (figure 7A) (Col. 35, line 56 to Col. 36, line 30);

connecting a [the] network bus (760/787 – figure 7A) to the system data bus (756 – figure 7A) and receiving system data bus information communicated along the system data bus (Col. 34, lines 48-52);

connecting a mass storage device (135 – figure 7A) to the system data bus (756 – figure 7A);

connecting a data switch (786 – figure 7A) to the network bus (760/787 – figure 7A), the data switch receiving the system data bus information and sending the system data bus information to one or more switch ports; (Col. 33, lines 32-35 and Col. 34, lines 48-59)

connecting a processor (728 – figure 7A) to the system data bus (756 – figure 7A) (Col. 33, lines 24-35);

connecting memory (129 – figure 7A) to the system data bus (756 – figure 7A);

wherein the deciphered information signals communicate from the media bus [761], to the system data bus [756], and to the network bus [787] for routing by the data switch [786] (Col. 33, lines 24-35),

wherein data switch information from the data switch communicates from the network bus to the system data bus, but the data switch information is prevented from communicating to the media bus (Col. 33, lines 26-39).

Rakib fails to specifically disclose a decoder circuit connected to the decryption circuit, a cipher/decipher circuit connected to the decoder circuit, a video overlay processor, a network bus receiving video overlay signals, a mass storage device connected to the system data bus and storing the system data bus information and the video overlay signals, a data switch connected to the network bus, the data switch receiving the system data bus information and the video overlay signals and sending the system data bus information and the video overlay signals to one or more switch ports, and wherein the video overlay signals communicate from the video overlay processor, to the system data bus, and to the network bus for routing by the data switch and wherein a browser-based graphical user interface is stored in the memory, the processor automatically downloads and stores content items to the memory, the processor receives an instruction to retrieve the graphical user interface from the memory, and the processor sends the graphical user interface to a client device with the graphical user interface describing the content items stored in the memory.

In an analogous art, Sheppard discloses a method of providing multimedia on demand, the method comprising:

connecting a video overlay processor (450 – figure 5) between the system data bus (422 – figure 5) and the media bus (424 – figure 5), the video overlay processor

receiving the deciphered information signals from the media bus [424] and sending video overlay signals to the system data bus [422] (¶ 0069-0071);

connecting the network bus (interconnecting line between CNTRL BUS 422 and NIM 410) to the system data bus (422 – figure 5) and receiving system data bus information and video overlay signals communicated along the system data bus (¶ 0057-0058 & 0069-0071).

Accordingly, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the method of Rakib to include a video overlay processor and a network bus receiving system data bus and video overlay information as taught by Sheppard for the benefit of supporting communications with multiple locations within the home.

The combination of Rakib and Sheppard fail to specifically disclose a decoder circuit connected to the decryption circuit and a mass storage device receiving system data bus information and video overlay signals.

In an analogous art, Hirota discloses a method of providing multimedia on demand, the method comprising:

connecting a decoder circuit (17 – figure 1) to the decryption circuit (15 – figure 1) that coverts the decrypted information signal from one format to a second format (Col. 3, lines 25-48);

connecting a video overlay processor (110 – figure 1) between the system data bus and the media bus, the video overlay processor receiving the deciphered

information signals from the media bus and sending video overlay signals to the system data bus (Col. 3, lines 40-59);

connecting a mass storage device (119 – figure 1) to the system data bus and storing the system data bus information and the video overlay signals (Col. 4, lines 20-64).

Accordingly, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the method of Rakib and Sheppard to include a decoder circuit connected to the decryption circuit and a mass storage device storing system data bus information and the video overlay signals as taught by Hirota for the benefit of allowing user's to store their favorite programs for viewing at a later time.

The combination of Rakib, Sheppard, and Hirota fail to specifically disclose wherein the video overlay signals communicate from the video overlay processor, to the system data bus, and to the network bus for routing by the data switch.

In an analogous art, Arsenault discloses a method of providing multimedia on demand, the method comprising: wherein the video overlay signals communicate from the video overlay processor (from video decoder & OSD 78), to the system data bus, and to the network bus for routing by the data switch (84 – figure 2). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the combination of Rakib, Sheppard, and Hirota to include wherein the video overlay signals communicate from the video overlay processor, to the system data bus, and to the network bus for routing by the data switch as taught by Arsenault for the

benefit of providing programming information which can be used to improve the user's on-demand viewing experience.

However, the combination of Rakib, Sheppard, Hirota, and Arsenault fail to disclose wherein a browser-based graphical user interface is stored in the memory, the processor automatically downloads and stores content items to the memory, the processor receives an instruction to retrieve the graphical user interface from the memory, and the processor sends the graphical user interface to a client device with the graphical user interface describing the content items stored in the memory.

In an analogous art, Ellis discloses a method of providing multimedia on demand, the method comprising:

processing an instruction to automatically receive a first multimedia content item (i.e., processing circuitry 11 processes a request to record a program from a user) (steps 2610, 2620, & 2640 - figure 26; ¶ 0084 and 0077);

storing the first multimedia content item (steps 2660 & 2680 – figure 26; ¶ 0078-0080);

modifying a data table (i.e., directory of pending/recorded programs) to include a first multimedia content item identifier (i.e., program title), the first multimedia content item identifier correspond to the first multimedia content item (¶ 0080-0082 and 0148-0150);

sending a multimedia usage report, the multimedia usage report based on at least in part on the data table (i.e., transmit to user a directory listing of recorded programs) (figure 18d; ¶ 0077-0078 and 0148-0149);

storing a browser-based graphical user interface (350 – figure 18d) in the memory (13/15 – figures 2a-2e) (¶ 0078-0080, 0148, and 0196);

automatically downloading and storing content items to the memory (i.e., processing circuitry 11 retrieves program guide data from program guide server 25, ¶ 0067-0070);

receiving an instruction to retrieve the graphical user interface from the memory (i.e., user television equipment 22 receives a Directory command from remote control 40 which is processed by remote server 24) (¶ 0148-0151); and

sending the graphical user interface to a client device (22 – figures 2a-2e) with the graphical user interface describing the content items (i.e., recorded programs) stored in the memory (i.e., memory 13/15 stores a directory of recording programs for the user and when requested, the programs are displayed for the user as shown in figure 18d) (¶ 0075-0080, 0082, 0148-0151, and 0196).

Accordingly, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the combination of Rakib, Sheppard, Hirota, and Arsenault to include wherein a browser-based graphical user interface is stored in the memory, the processor automatically downloads and stores content items to the memory, the processor receives an instruction to retrieve the graphical user interface from the memory, and the processor sends the graphical user interface to a client device with the graphical user interface describing the content items stored in the memory as taught by Ellis for the benefit of providing a user-friendly display means for displaying to the viewer programs that have previously been recorded.

Rakib, Sheppard, Hirota, Arsenault, and Ellis fail to disclose receiving the multimedia content item at a transmission rate that is less than a real time transmission rate in bytes per second.

In an analogous art, Craig discloses receiving a multimedia content item at a transmission rate that is less than a real time transmission rate in bytes per second (*i.e.,* slower than real-time) (Col. 11, line 60 to Col. 12, line 5), thus providing multiple service levels and charging subscribers accordingly. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the method of Rakib, Sheppard, Hirota, Arsenault, and Ellis to include receiving the multimedia content item at a less-than-real-time transmission rate for the benefit of providing flexible service arrangements that match the needs of subscribers.

As for Claim 18, the combination of Rakib, Sheppard, Hirota, Arsenault, Ellis, and Craig disclose, in particular Rakib teaches instructions for receiving a command from the client device that was transmitted from a remote control (Col. 33, lines 24-35).

As for Claim 19, the combination of Rakib, Sheppard, Hirota, Arsenault, Ellis, and Craig disclose, in particular Rakib teaches instructions for retrieving another instruction from the memory that is associated with the command from the remote control (Col. 33, lines 24-35).

As for Claim 20, the combination of Rakib, Sheppard, Hirota, Arsenault, Ellis, and Craig disclose, in particular Ellis teaches instructions in the graphical user interface that control a residential gateway from the client device (¶ 0077-0078 and 0148-0149).

As for Claim 23, the combination of Rakib, Sheppard, Hirota, Arsenault, Ellis, and Craig disclose, in particular Ellis teaches instructions for storing a data table (i.e., directory of recorded programs) in the memory that associates a content identifier (i.e., program title) to a usage indicator (i.e., is the program recording pending or has it been recorded) for each content item, the content identifier identifying each content item automatically downloaded to the memory and the usage indicator indicating that a content item has been played (¶ 0080-0082 and 0148-0150).

As for Claim 24, the combination of Rakib, Sheppard, Hirota, Arsenault, Ellis, and Craig disclose, in particular Ellis teaches instructions for storing a usage indicator for each content item that indicates when a content item has been played (¶ 0080-0082 and 0148-0150).

As for Claim 25, the combination of Rakib, Sheppard, Hirota, Arsenault, Ellis, and Craig disclose, in particular Ellis teaches instructions for accessing a profile to determine the content items stored in the memory (i.e., directory associates each recorded program to a specific user) (figures 4 and 5; ¶ 0080-0082).

Regarding Claim 26, Rakib discloses a method for providing multimedia-on-demand, the method comprising:

connecting a plurality of tuners (780, 700, 702, 704 – figure 7A) and demodulators (820, 738, 746 – figure 7A) to a system data bus (756 - figure 7A) and to an analog-to-digital converter (730 – figure 7A), the plurality of tuners and demodulators sending an analog information signal to the analog-to-digital converter, and the analog-to-digital converter outputting digital information signal based at least in part on the analog information signal (Col. 32, lines 49-52, Col. 33, lines 24-39, Col. 34, lines 16-52);

connecting the plurality of tuners and demodulators to a decryption circuit (726/786 – figure 7A) that decrypts an encrypted information signal received from the plurality of tuners and demodulators and produces a decrypted information signal (Col. 36, lines 4-30);

connecting a decoder circuit (742 – figure 7A) that coverts the information signal from one format to a second format (Col. 34, lines 24-36);

connecting a cipher/decipher circuit to the decoder circuit [742] and to the analog-to-digital converter [730] that deciphers the digital information from the analog-to-digital converter that deciphers the converted decrypted information signal from the decoder circuit (i.e., compressed video data in encapsulated in PCI bus packets for transmission on bus 761) (Col. 34, lines 37-38);

connecting the cipher/decipher circuit connected to the media bus (761 – figure 7A) and sending deciphered information signals to the media bus (Col. 34, lines 37-41);

connecting the system data bus (756 – figure 7A) to the media bus (761 – figure 7A) and configuring the system data bus to only receive the deciphered information signals from the media bus, the system data bus unable to send information to the media bus (i.e., system data bus 756 only sends signals to individual circuits that are directly connected) (figure 7A) (Col. 35, line 56 to Col. 36, line 30);

connecting the network bus (760/787 – figure 7A) to the system data bus (756 – figure 7A) and receiving system data bus information communicated along the system data bus (Col. 34, lines 48-52);

connecting a mass storage device (135 – figure 7A) to the system data bus (756 – figure 7A);

connecting a data switch (786 – figure 7A) to the network bus (760/787 – figure 7A), the data switch receiving the system data bus information and sending the system data bus information to one or more switch ports; (Col. 33, lines 32-35 and Col. 34, lines 48-59)

connecting a processor (728 – figure 7A) connected to the system data bus (756 – figure 7A) (Col. 33, lines 24-35);

connecting memory (129 – figure 7A) to the system data bus (756 – figure 7A);

wherein the deciphered information signals communicate from the media bus [761], to the system data bus [756], and to the network bus [787] for routing by the data switch [786] (Col. 33, lines 24-35),

wherein data switch information from the data switch communicates from the network bus to the system data bus, but the data switch information is prevented from communicating to the media bus (Col. 33, lines 26-39).

Rakib fails to specifically disclose a decoder circuit connected to the decryption circuit, a cipher/decipher circuit connected to the decoder circuit, a video overlay processor, a network bus receiving video overlay signals, a mass storage device connected to the system data bus and storing the system data bus information and the video overlay signals, a data switch connected to the network bus, the data switch receiving the system data bus information and the video overlay signals and sending the system data bus information and the video overlay signals to one or more switch ports, and wherein the video overlay signals communicate from the video overlay processor, to the system data bus, and to the network bus for routing by the data switch.

In an analogous art, Sheppard discloses a method for providing multimedia on demand, the method comprising:

connecting a video overlay processor (450 – figure 5) between the system data bus (422 – figure 5) and the media bus (424 – figure 5), the video overlay processor receiving the deciphered information signals from the media bus [424] and sending video overlay signals to the system data bus [422] (¶ 0069-0071);

connecting the network bus (interconnecting line between CNTRL BUS 422 and NIM 410) to the system data bus (422 – figure 5) and receiving system data bus and

video overlay information communicated along the system data bus (¶ 0057-0058 & 0069-0071).

Accordingly, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the method of Rakib to include a video overlay processor and a network bus receiving system data bus and video overlay information as taught by Sheppard for the benefit of supporting communications with multiple locations within the home.

The combination of Rakib and Sheppard fail to specifically disclose a decoder circuit connected to the decryption circuit and a mass storage device receiving system data bus information and video overlay signals.

In an analogous art, Hirota discloses a method for providing multimedia on demand, the method comprising:

connecting a decoder circuit (17 – figure 1) to the decryption circuit (15 – figure 1) that coverts the decrypted information signal from one format to a second format (Col. 3, lines 25-48);

connecting a video overlay processor (110 – figure 1) between the system data bus and the media bus, the video overlay processor receiving the deciphered information signals from the media bus and sending video overlay signals to the system data bus (Col. 3, lines 40-59);

connecting a mass storage device (119 – figure 1) to the system data bus and storing the system data bus information and the video overlay signals (Col. 4, lines 20-64).

Accordingly, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the method of Rakib and Sheppard to include a decoder circuit connected to the decryption circuit and a mass storage device storing system data bus information and the video overlay signals as taught by Hirota for the benefit of allowing user's to store their favorite programs for viewing at a later time.

The combination of Rakib, Sheppard, and Hirota fail to specifically disclose wherein the video overlay signals communicate from the video overlay processor, to the system data bus, and to the network bus for routing by the data switch.

In an analogous art, Arsenault discloses a method for providing multimedia on demand, the method comprising: wherein the video overlay signals communicate from the video overlay processor (from video decoder & OSD 78), to the system data bus, and to the network bus for routing by the data switch (84 – figure 2). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the combination of Rakib, Sheppard, and Hirota to include wherein the video overlay signals communicate from the video overlay processor, to the system data bus, and to the network bus for routing by the data switch as taught by Arsenault for the benefit of providing programming information which can be used to improve the user's on-demand viewing experience.

However, the combination of Rakib, Sheppard, Hirota, and Arsenault fail to disclose wherein a browser-based graphical user interface is stored in the memory, the processor automatically downloads and stores content items to the memory, the processor receives an instruction to retrieve the graphical user interface from the

memory, and the processor sends the graphical user interface to a client device with the graphical user interface describing the content items stored in the memory.

In an analogous art, Ellis discloses a method of providing multimedia on demand, the method comprising:

processing an instruction to automatically receive a first multimedia content item (i.e., processing circuitry 11 processes a request to record a program from a user) (steps 2610, 2620, & 2640 - figure 26; ¶ 0084 and 0077);

storing the first multimedia content item (steps 2660 & 2680 – figure 26; ¶ 0078-0080);

modifying a data table (i.e., directory of pending/recorded programs) to include a first multimedia content item identifier (i.e., program title), the first multimedia content item identifier correspond to the first multimedia content item (¶ 0080-0082 and 0148-0150);

sending a multimedia usage report, the multimedia usage report based on at least in part on the data table (i.e., transmit to user a directory listing of recorded programs) (figure 18d; ¶ 0077-0078 and 0148-0149);

storing a browser-based graphical user interface (350 – figure 18d) in the memory (13/15 – figures 2a-2e) (¶ 0078-0080, 0148, and 0196);

automatically downloading and storing content items to the memory (i.e., processing circuitry 11 retrieves program guide data from program guide server 25, ¶ 0067-0070);

receiving an instruction to retrieve the graphical user interface from the memory (i.e., user television equipment 22 receives a Directory command from remote control 40 which is processed by remote server 24) (¶ 0148-0151); and

sending the graphical user interface to a client device (22 – figures 2a-2e) with the graphical user interface describing the content items (i.e., recorded programs) stored in the memory (i.e., memory 13/15 stores a directory of recording programs for the user and when requested, the programs are displayed for the user as shown in figure 18d) (¶ 0075-0080, 0082, 0148-0151, and 0196).

Accordingly, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the combination of Rakib, Sheppard, Hirota, and Arsenault to include wherein a browser-based graphical user interface is stored in the memory, the processor automatically downloads and stores content items to the memory, the processor receives an instruction to retrieve the graphical user interface from the memory, and the processor sends the graphical user interface to a client device with the graphical user interface describing the content items stored in the memory as taught by Ellis for the benefit of providing a user-friendly display means for displaying to the viewer programs that have previously been recorded.

Rakib, Sheppard, Hirota, Arsenault, and Ellis fail to disclose receiving the multimedia content item at a transmission rate that is less than a real time transmission rate in bytes per second.

In an analogous art, Craig discloses processing the first multimedia content item at a transmission rate that is less than a real time transmission rate in bytes per second

(*i.e.,* slower than real-time) (Col. 11, line 60 to Col. 12, line 5), thus providing multiple service levels and charging subscribers accordingly. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the method of Rakib, Sheppard, Hirota, Arsenault and Ellis to include processing the first multimedia content item at a less-than-real-time transmission rate as taught by Craig for the benefit of providing flexible service arrangements that match the needs of subscribers.

As for Claim 27, the combination of Rakib, Sheppard, Hirota, Arsenault, Ellis, and Craig disclose, in particular Rakib teaches

receiving a command from the client device that was transmitted from a remote control (Col. 33, lines 24-35).

retrieving another instruction from the memory that is associated with the command from the remote control (Col. 33, lines 24-35).

As for Claim 28, the combination of Rakib, Sheppard, Hirota, Arsenault, Ellis, and Craig disclose, in particular Ellis teaches instructions in the graphical user interface that control a residential gateway from the client device (¶ 0077-0078 and 0148-0149).

As for Claim 29, the combination of Rakib, Sheppard, Hirota, Arsenault, Ellis, and Craig disclose, in particular Ellis teaches a data table (i.e., directory of recorded programs) stored in the memory that associates a content identifier (i.e., program title)

to a usage indicator (i.e., is the program recording pending or has it been recorded) for each content item, the content identifier identifying each content item automatically downloaded to the memory and the usage indicator indicating that a content item has been played (¶ 0080-0082 and 0148-0150).

As for Claim 30, the combination of Rakib, Sheppard, Hirota, Arsenault, Ellis, and Craig disclose, in particular Ellis teaches storing a usage indicator for each content item that indicates when a content item has been played (¶ 0080-0082 and 0148-0150).

As for Claim 31, the combination of Rakib, Sheppard, Hirota, Arsenault, Ellis, and Craig disclose, in particular Ellis teaches including the usage indicator in the graphical user interface for each content item stored in the memory (figures 18d and 18f; ¶ 0080-0082 and 0148-0150).

As for Claim 32, the combination of Rakib, Sheppard, Hirota, Arsenault, Ellis, and Craig disclose, in particular Ellis teaches accessing a profile to determine the content items stored in the memory (i.e., directory associates each recorded program to a specific user) (figures 4 and 5; ¶ 0080-0082).

As for Claim 33, the combination of Rakib, Sheppard, Hirota, Arsenault, Ellis, and Craig disclose, in particular Hirota teaches authenticating access to the content items using a smart cart reader (118 – figure 1) (Col. 4, lines 3-13).

As for Claim 34, the combination of Rakib, Sheppard, Hirota, Arsenault, Ellis, and Craig disclose, in particular Ellis teaches wherein sending the graphical user interface to the client device comprises sending the graphical user interface to a set top box (28 – figure 7) (¶ 0098-0099).

Conclusion

10. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to CHRIS PARRY whose telephone number is (571) 272-

8328. The examiner can normally be reached on Monday through Friday, 8:00 AM EST to 4:00 PM EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, JOHN MILLER can be reached on (571) 272-7353. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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